Journal of the American Society for Information Science

JASIS

Contents

Volume 46, 1995
Issue 1, January 1995

RESEARCH

Efficient Decoding of Compressed Data
Mostafa A. Bassiouni and Amar Mukherjee 1

Cognitive Resemblance and Citation Relations in Chemical Engineering Publications
H. P. F. Peters, R. R. Braam, and A. F. J. van Raan 9

Searcher Response in a Hypertext-Based Bibliographic Information Retrieval System
Alexandra Dimitroff and Dietmar Wolfram 22

Domain Analysis, Literary Warrant, and Consensus: The Case of Fiction Studies
Clare Beghtol 30

Unused Relevant Information in Research and Development
Patrick Wilson 45

Interactive Thesaurus Navigation: Intelligence Rules OK?
Susan Jones, Mike Gatford, Steve Robertson, Micheline Hancock-Beaulieu, Judith Secker, and Steve Walker 52

EUROPEAN RESEARCH LETTER

Image Databases for Multimedia Projects
Peter Enser 60

BOOK REVIEWS

***In-Depth Review:* Indexing Books, by Nancy C. Mulvany**
Bella Hass Weinberg 65

Critical Approaches to Information Technology in Librarianship, Foundations and Applications, edited by John Buschman
Basil Stuart-Stubbs 73

Measuring the Impact of Information on Development, edited by Michel J. Menou
Rohan Samarajiva 75

Cases in Online Search Strategy, by Bruce A. Shuman
Susan McGlamery 77

A Small Matter of Programming Perspectives on End User Computing, by Bonnie Nardi
Gary Marchionini 78

Introduction to Automation for Librarians (3rd ed.), by William Saffady
Brian C. O'Connor 79

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 2, March 1995

IN MEMORIAM

Audrey N. Grosch, January 10, 1934–July 16, 1994
Janet M. Arth, Roy Tally, and Joan D. Jensen 81

RESEARCH

ACTS: An Automatic Chinese Text Segmentation System for Full Text Retrieval
Zimin Wu and Gwyneth Tseng 83

Fractional Counts for Authorship Attribution: A Numerical Study
Quentin Burrell and Ronald Rousseau 97

People, Words, and Perceptions: A Phenomenological Investigation of Textuality
Terrence A. Brooks 103

Degree of Agreement in Naming Objects and Concepts for Information Retrieval
Lourdes Y. Collantes 116

Measuring Retrieval Effectiveness Based on User Preference of Documents
Y. Y. Yao 133

Effectiveness of Surname-Title-Words Searches by Scholars
Frederick G. Kilgour 146

IN-DEPTH BOOK REVIEW

Art & Architecture Thesaurus (2nd ed.), by Toni Petersen

Guide to Indexing and Cataloging With the Art & Architecture Thesaurus, edited by Toni Petersen and Patricia J. Barnett
Bella Hass Weinberg 152

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 3, April 1995

IN THIS ISSUE
Bert R. Boyce 161

RESEARCH

Highlights: Language- and Domain-Independent Automatic Indexing Terms for Abstracting
Jonathan D. Cohen 162

Automatic Thesaurus Generation for an Electronic Community System
Hsinchun Chen, Tak Yim, David Fye, and Bruce Schatz 175

Machine Learning for Information Retrieval: Neural Networks, Symbolic Learning, and Genetic Algorithms
Hsinchun Chen 194

A Life in the Information Trade
Charles T. Meadow 217

Documentary Abstracting: Toward a Methodological Model
Maria Pinto Molina 225

BRIEF COMMUNICATION

The Centenary of "Madame Documentation": Suzanne Briet, 1894–1989
Michael K. Buckland 235

BOOK REVIEWS

Abstracting, Information Retrieval and the Humanities: Providing Access to Historical Literature, by Helen R. Tibbo
Joseph A. Busch 238

Collection Management and Development: Issues in an Electronic Era, edited by Peggy Johnson and Bonnie MacEwan
Dennis Carrigan 239

Scientific Literature in Wartime: The Allied-German Rivalry, 1939–1945, by Pamela Spence Richards
Robert S. Taylor 241

BOOKS RECEIVED, BUT NOT YET REVIEWED
Donald O. Case 242

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 4, May 1995

IN THIS ISSUE
Bert R. Boyce 243

RESEARCH

Scholarly E-Conferences on the Academic Networks: How Library and Information Science Professionals Use Them
Diane K. Kovacs, Kara L. Robinson, and Jeanne Dixon 244

Representing Documents Using an Explicit Model of Their Similarities
Brian T. Bartell, Garrison W. Cottrell, and Richard K. Belew 254

Combining Automatic and Manual Index Representations in Probabilistic Retrieval
T. B. Rajashekar and W. Bruce Croft 272

High School Students' Use of Databases: Results of a National Delphi Study
Delia Neuman 284

Reexamining the Role of Conference Papers in Scholarly Communication
M. Carl Drott 299

Biotechnology in Context: A Database-Filtering Approach to Identifying Core and Productive Non-Core Journals Supporting Multidisciplinary R & D
Katherine W. McCain 306

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 5, June 1995

IN THIS ISSUE
Bert R. Boyce 243

GUEST EDITORIALS

Writing Wrongs
Ronald E. Rice 322

Book Reviewing
Donald O. Case 325

RESEARCH

Context as a Factor in Personal Information Management Systems
Deborah K. Barreau 327

Multimedia and Comprehension: The Relationship among Text, Animation, and Captions
Andrew Large, Jamshid Beheshti, Alain Breuleux, and Andre Renaud 340

An Algorithmic Approach to Concept Exploration in a Large Knowledge Network (Automatic Thesaurus Consultation): Symbolic Branch-and-Bound Search vs. Connectionist Hopfield Net Activation
H. Chen and T. Ng 348

Dynamic Behavior of Bradford's Law
Ye-Sho Chen, P. Pete Chong, and Morgan Y. Tong 370

BRIEF COMMUNICATIONS

Coinage of the Term *Information Science*
Fred R. Shapiro 384

Lotka's Law, Price's Urn, and Electronic Publishing
Michael Koenig and Toni Harrell 386

BOOK REVIEWS

The Classification of Fiction: The Development of a System Based on Theoretical Principles, by Clare Beghtol
Esther Green Bierbaum 389

Hypertext and the Technology of Conversation: Orderly Situational Choice, by Susan H. Gray
Myke Gluck 390

Publishing in the Information Age: A New Management Framework for the Digital Era, by Douglas M. Eisenhart
Jacqueline Algon 392

Systems Analysis for Librarians and Information Professionals, by Larry N. Osborne and Margaret Nakamura
Robert M. Hayes 393

Everybody's Guide to the Internet, by Adam Gaffin
Samantha Kelly Hastings 394

Organizing Knowledge (2nd ed.), by Jennifer E. Rowley
Ling Hwey Jeng 394

Using Subject Headings for Online Retrieval: Theory, Practice and Potential, by Karen Markey Drabenstott and Diane Vizine-Goetz
Ling Hwey Jeng 396

LETTER TO THE EDITOR 397

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 6, July 1995

IN THIS ISSUE
Bert R. Boyce 399

RESEARCH

Toward a New Horizon in Information Science: Domain-Analysis
Birger Hjørland and Hanne Albrechtsen 400

Generalized Success-Breeds-Success Principle Leading to Time-Dependent Informetric Distributions
Leo Egghe and Ronald Rousseau 426

Understanding Performance in Information Systems: Blending Relevance and Competence
Myke Gluck 446

Improving the Accuracy of Institute for Scientific Information's Journal Impact Factors
H. F. Moed and Th. N. Van Leeuwen 461

BRIEF COMMUNICATION

Multiple Authorship in Biomedical Papers: A South African Case Study
Susan Steynberg and Steve F. Rossouw 468

ERRATUM 473

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 7, August 1995

IN THIS ISSUE
Bert R. Boyce 477

RESEARCH

An Evaluation of Interactive Boolean and Natural Language Searching with an Online Medical Textbook
William R. Hersh and David H. Hickam 478

A Study of User Performance and Attitudes with Information Retrieval Interfaces
Charles T. Meadow, Jiabin Wang, and Weijing Yuan 490

Subject Searching in Online Catalogs: Metaknowledge Used by Experienced Searchers
Tschera Harkness Connell 506

Sublanguage Terms: Dictionaries, Usage, and Automatic Classification
Robert M. Losee and Stephanie W. Haas 519

The Literature of Acquired Immunodeficiency Syndrome (AIDS): Continuing Changes in Publication Patterns and Subject Access
Esther Green Bierbaum and Terrence A. Brooks 530

***In Situ* Generation of Compressed Inverted Files**
Alistair Moffat and Timothy A. H. Bell 537

Fitting Information Systems to Collaborating Design Teams
Maryalice Citera, Michael D. McNeese, Clifford E. Brown, Jonathan A. Selvaraj, Brian S. Zaff, and Randall D. Whitaker 551

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 8, September 1995

IN THIS ISSUE
Bert R. Boyce 561

RESEARCH

The Retrieval Effectiveness of Five Clustering Algorithms as a Function of Indexing Exhaustivity
Robert Burgin 562

Preface
John M. Heilprin 573

Science and Technology: From Prescientific Times to the Present
Laurence B. Heilprin 574

Information and Thermodynamics: Toward a Closer Unification of Information Science with Other Sciences
Laurence B. Heilprin 579

Identification of Technological Gatekeepers in the Information Technology Profession
Jane E. Klobas and Tanya McGill 581

Medical Students' Personal Knowledge, Searching Proficiency, and Database Use in Problem Solving
Barbara M. Wildemuth, Ruth de Bliek, Charles P. Friedman, and Dean D. File 590

PERSPECTIVES ON ... THE CHEMIST'S WORKSTATION

Introduction and Overview
Loren D. Mendelsohn 609

CHEMCONF: An Experiment in International Online Conferencing
Thomas C. O'Haver 611

CHMINF-L: The Chemical Information Sources Discussion List
Gary Wiggins 614

Getting Your Name on the Right Desktops, or How to Be Found on the Internet
Phoebe Fagan 618

Chemical Structures at the Desktop: Integrating Drawing Tools with On-Line Registry Files
Jan L. Baumgras and Anne E. Rogers 623

Design Considerations for Creating a Chemical Information Workstation
John A. Mess 632

Do Workstations Work Too Well? An Investigation into Library Workstation Popularity and the "Principle of Least Effort"
Tina E. Chrzastowski 638

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 9, October 1995

IN THIS ISSUE
Bert R. Boyce 645

RESEARCH

Topical Relevance Relationships. I. Why Topic Matching Fails
Rebecca Green 646

Topical Relevance Relationships. II. An Exploratory Study and Preliminary Typology
Rebecca Green and Carol A. Bean 654

Children's Searching Behavior on Browsing and Keyword Online Catalogs: The Science Library Catalog Project
Christine L. Borgman, Sandra G. Hirsh, Virginia A. Walter, and Andrea L. Gallagher 663

An Associative Model of Word Selection in the Generation of Search Queries
Reginald Ferber, Manfred Wettler, and Reinhard Rapp 685

BRIEF COMMUNICATIONS

E-Journals and Tenure
Blaise Cronin and Kara Overfelt 700

Cataloging for a Specific Miniature Catalog
Frederick G. Kilgour 704

BOOK REVIEWS

Library Records: A Retention and Confidentiality Guide, by Shirley A. Wiegand
Kenneth D. Crews 707

From Writing to Computers, by Julian Warner
Michael Heim 707

Global Networks: Computers and International Communication, edited by Linda M. Harasim
Samantha Kelly Hastings 708

If You Want to Evaluate Your Library (2nd ed.), by F. W. Lancaster
Douglas L. Zweizig 710

Groupware in the 21st Century: Computer Supported Cooperative Working Toward the Millennium, edited by Peter Lloyd
William Nance 710

The Systems Librarian: The Role of the Library Systems Manager, edited by Graeme Muirhead
Zorana Ercegovac 712

Information Retrieval: New Systems and Current Research. Proceedings of the 15th Research Colloquium of the British Computer Society Information Retrieval Specialist Group, edited by Ruben Leon
Terrence A. Brooks 713

Who Owns Information? From Privacy to Public Access, by Anne Wells Branscomb
Dennis Carrigan 714

LETTERS TO THE EDITOR 717

ERRATUM 719

DISKETTE SUBMISSION INSTRUCTIONS I

Issue 10, December 1995

IN MEMORIAM

Miranda Hsu-Yuang Pao
Bert R. Boyce 723

PERSPECTIVES ON...MEDICAL INFORMATICS: INFORMATION TECHNOLOGY IN HEALTH CARE

Introduction and Overview
William R. Hersh and Lois F. Lunin 726

Information Needs of Physicians
Paul N. Gorman 729

The Medical Literature as a Resource for Health Care Practice
K. Ann McKibbon, Nancy Wilczynski, Robert S. Hayward, Cynthia J. Walker-Dilks, and R. Brian Haynes 737

Information Retrieval in Medicine: The SAPHIRE Experience
William R. Hersh and David Hickam 743

Full-Text Databases in Medicine
MaryEllen C. Sievert, Emma Jean McKinin, and E. Diane Johnson 748

Automated Retrieval from Multiple Disparate Information Sources: The World Wide Web and the NLM's Sourcerer Project
R. P. Channing Rodgers 755

An Infrastructure for the Development of Health Care Information Systems from Distributed Components
Stephan R. A. Deibel and Robert A. Greenes 765

The Electronic Medical Record: Promises and Problems
William R. Hersh 772

Vocabulary and Health Care Information Technology: State of the Art
James J. Cimino 777

Consumer Health Informatics: Health Information Technology for Consumers
Holly Brügge Jimison and Paul Phillip Sher 783

BOOK REVIEWS

Essentials of Fuzzy Modeling and Control, by R. R. Yager and D. P. Filey
Hao Ying 791

Knowledge-Based Systems for General Reference Work: Applications, Problems, and Progress, by John V. Richardson Jr.
Patrick Wilson 792

Collective Intelligence in Computer-Based Collaboration, by John B. Smith
William Nance 793

Cyberspace and the Law: Your Rights and Duties in the Online World, by Edward A. Cavazos and Gavino Morin
Kenneth D. Crews 795

Future Libraries: Dreams, Madness, and Reality, by Walt Crawford and Michael Gorman
Charles Henry 796

LETTERS TO THE EDITOR 798

ERRATUM 801

AUTHOR INDEX 807

SUBJECT INDEX 811

VOLUME CONTENTS I

DISKETTE SUBMISSION INSTRUCTIONS X